**TECHNICAL NOTES**

**ESTIMATION OF CITIES/MUNICIPALITIES POPULATION PROJECTIONS**

**USING THE RESULTS OF THE 2015 POPCEN**

The estimation of city/municipality level population projections using the results of 2015 Census of Population (POPCEN) is in response to the needs of granular data on population for planning and programming purposes.

This city/municipal level population projections will be provided to those data requesters until the data on population from 2020 Census of Population and Housing (CPH) are published.

The data inputs and procedures in the computation of the 2020 to 2025 projected mid-year population for the cities/municipalities in the Philippines are described below:

Data Inputs:

1. City/Municipality population counts and population growth rates from past censuses (1990, 2000, 2010 and 2015)
2. Updated population projections using the results of 2015 POPCEN

Based on these inputs, population growth rates were utilized to estimate the midyear population for years 2020 to 2025 using the exponential population projection formula. The estimated midyear population were adjusted to conform to the provincial totals and in summary to the regional and national totals using the updated population projections based on the 2015 POPCEN that was already released on October 2019.

Procedures on the computation of city/municipality population projections:

1. Compute the population growth rate (PGR) from 2010 to 2015 using the population counts of the city/municipality.

where x = city/municipality

$$PGR\_{2010-2015X}=\left[\left(\frac{2015POPCEN\_{X}}{2010 CPH\_{X}}\right)^{\frac{1}{\frac{01 August 2015\_{- }01 May 2010}{365}}}\right]-1 x 100$$

1. Compute the city/municipality mid-year population estimate for projection period using the PGR of city/municipality and exponential population projection formula.

$$2020Projected Population\_{X}=\left[2015POPCEN\_{x} x (1+PGR\_{2010-2015x})^{\frac{01 July 2020-01 Aug 2015}{365}}\right]$$

$$2025Projected Population\_{X}=\left[2015POPCEN\_{x} x (1+PGR\_{2010-2015x})^{\frac{01 July 2025-01 Aug 2015}{365}}\right]$$

1. Adjust the population estimate for each city/municipality for each projection year to conform to the provincial totals based on updated population projections using 2015 POPCEN.

$$Adjustment Factor=\frac{Projected Population of Province}{Sum of projected population cities/municipalities within the province}$$

$$Adjusted Projected Population\_{x}=Projected Population\_{x} x Adjustment Factor$$

The updated city/municipality population projections for years 2020 to 2025 were computed based on the above procedures.